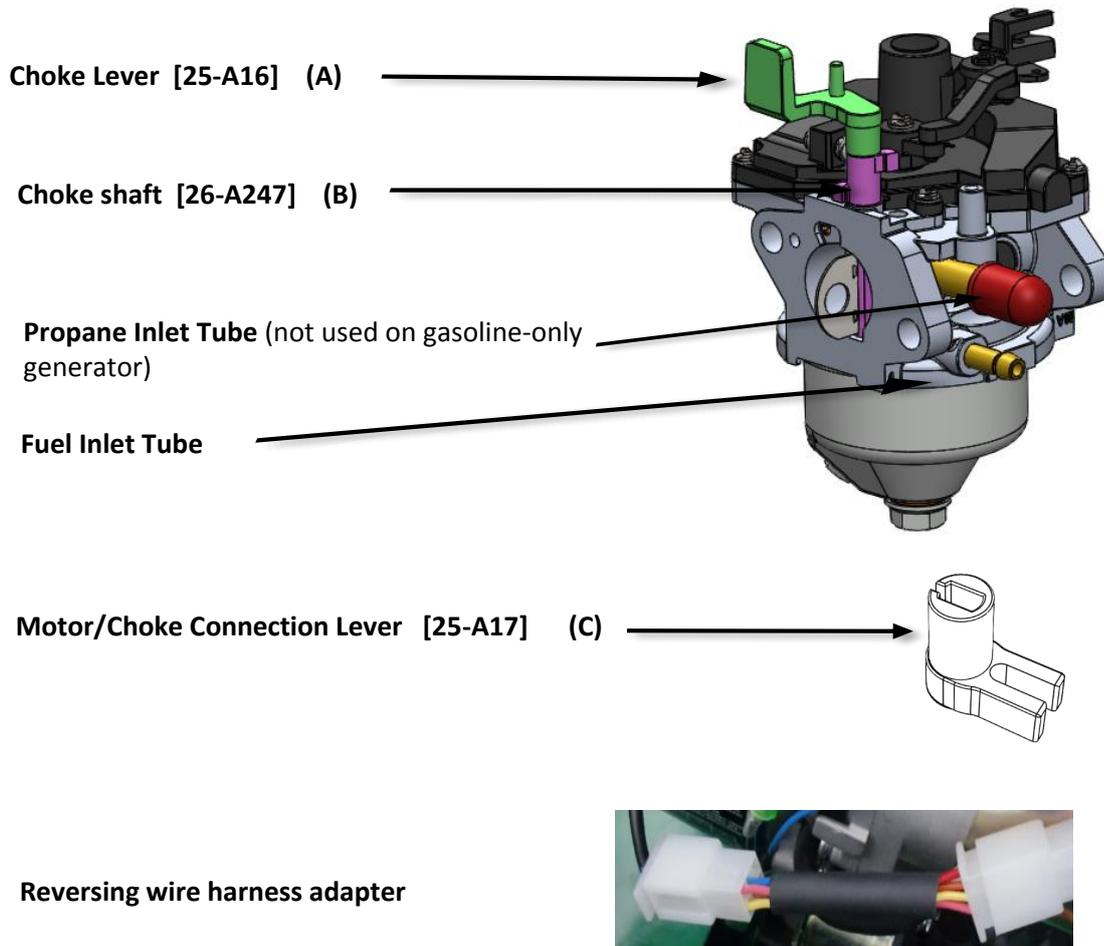


Assembly instruction for Auto Choke

The TillotsonTCT auto choke has 3 parts plus a wire harness adapter:

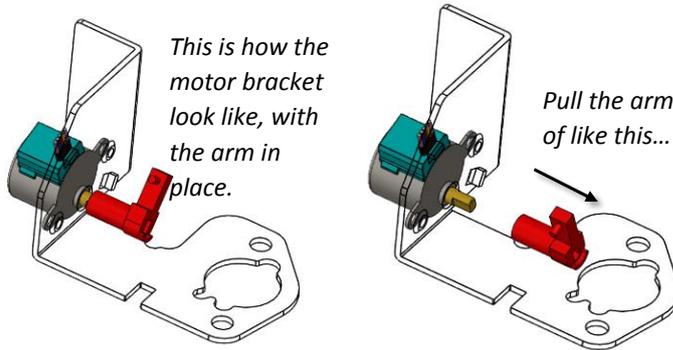
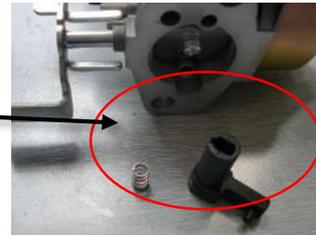


Step 1. Remove the standard carburetor. Remove the standard Carburetor from the engine.

This requires:

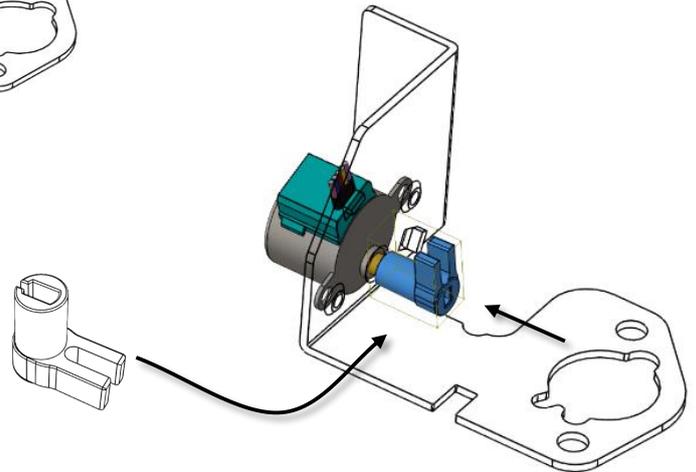
- A. Closing the fuel valve.
- B. Unscrewing the cover to the Air filter
- C. Removing the foam filter element and the metal frame.
- D. Unscrewing the inner air filter box bolts.
- E. Removing the gasket and rear filter box.
- F. Sliding off the carburetor and disconnecting the governor arm.
- G. Removing the auto-choke motor and bracket.

Step 2. Replace the Autochoke motor lever. Once the the auto-choke motor is removed, remove the arm from the Auto-Choke motor bracket. It should remove easily but be careful not to lose the spring. It can fall off easily.

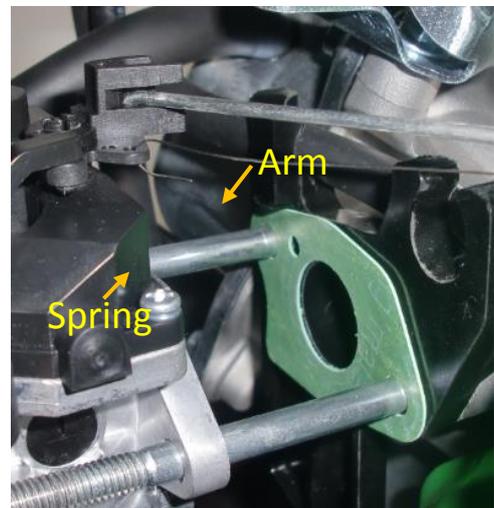


It is ok if the motor rotates during disassembly/ reassembly. The controller for the motor will reset it to the correct position when reconnected.

Attach the new TCT Motor/Choke Connection Lever (Part C) as shown.



Step 3. Install the TCT. Connect the Governor Arm and spring to the 3 throttle level as shown. If it is difficult to put in place, try turning the idle screw few turns counterclockwise, attach the arm and reset the idle screw back.



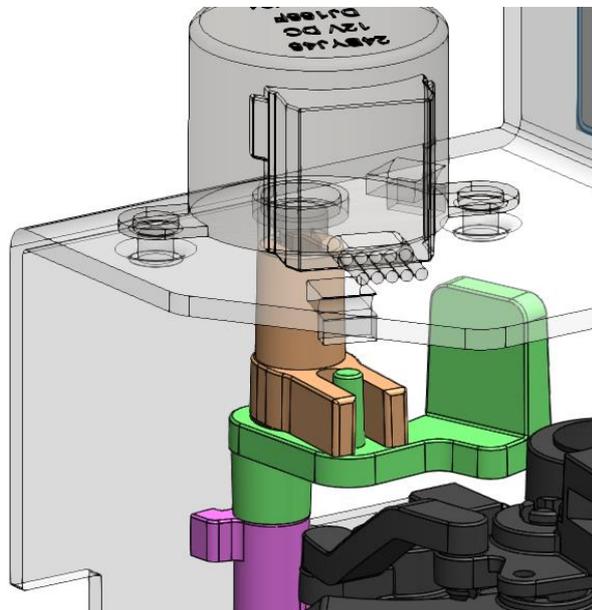
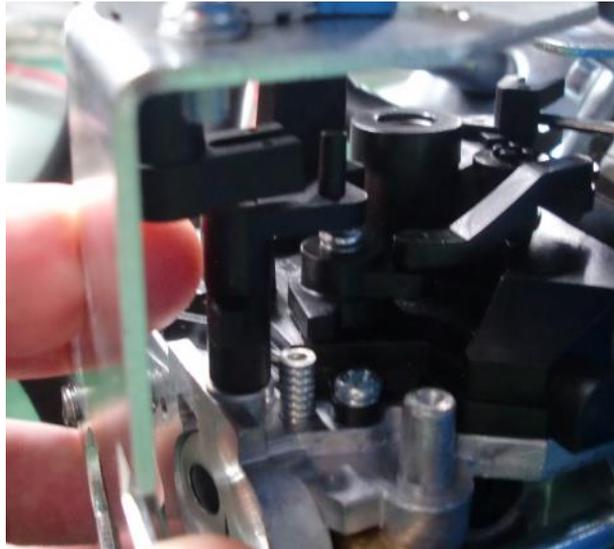
Connect the fuel line to the gasoline intake tube (not the larger propane tube).



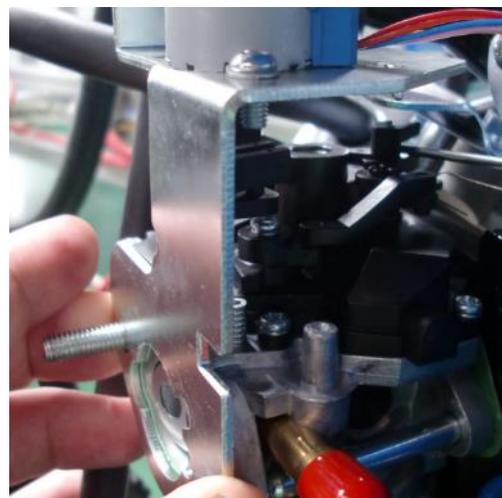
Step 4. Reconnect the Stepper Motor.

Re-insert the Servo bracket on the engine. Remember to put the gasket between the motor bracket and the carburetor.

Align the groove in the motor arm and the pin on the choke lever.



Test the connection by manually moving the choke lever. The motor should easily turn with the lever.



Step 5. Reinstall the Air filter.

Re-install the air-filter back cover.

Tighten the screws firmly but do not overtighten (otherwise, you will damage the threads).

Insert the metal plate as shown and insert the foam filter element.



Step 6. Attach the reversing wire harness. Before reconnecting the stepper motor wire harness, attach the reversing adapter between the two parts. This adapter reverses the rotation of the stepper which is necessary to properly operate the choke on the Tillotson TF-series



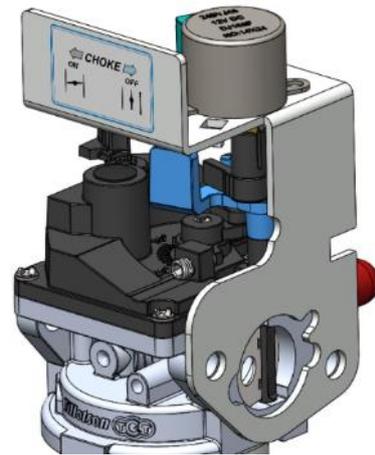
Step 7. Starting the engine. Before attempting to start the engine:

- Check the oil as shown in the operating manual. Add oil if necessary..
- Make sure there is gasoline in the tank and the fuel valve is open

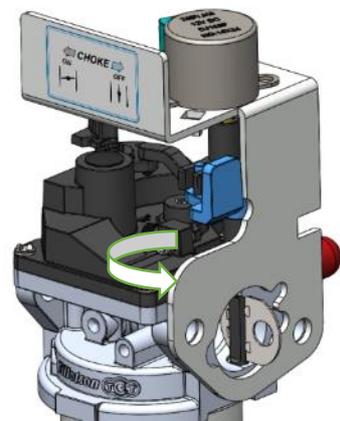
Also, when starting the engine for the first time after installing a new carburetor, a few attempts may be necessary since the carburetor does not have fuel in it.

To start the engine, make sure the choke lever (shown in blue) is in the ON position (closed).

Press the "Start" Button on the remote control, or turn the key to the start position or use the recoil starter.



Once started with the remote control, the choke should automatically return to the Off position (choke open). You may need to manually open the choke if you start the engine with the key or the recoil starter.



When the engine has started, it may be necessary to adjust the RPM

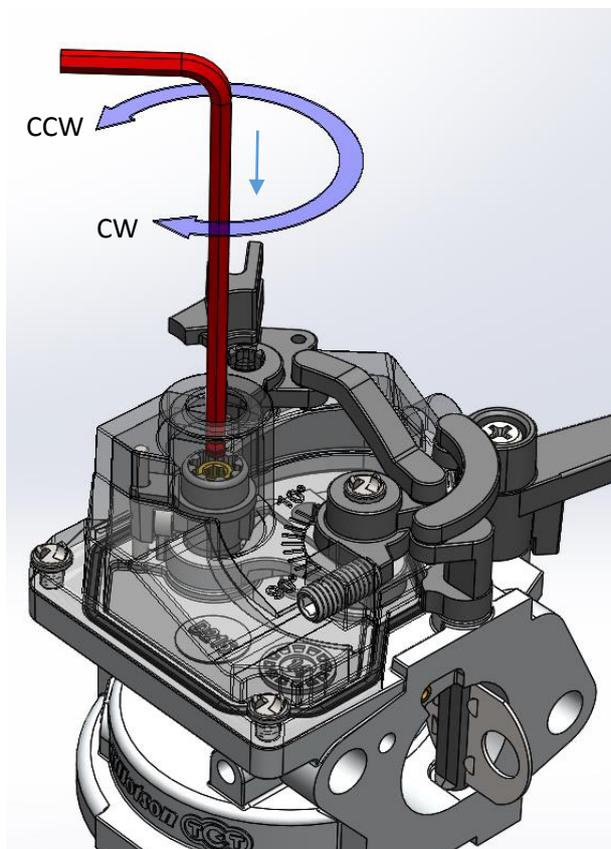
1. Adjust the governor speed screw 3750 – 3800 rpm
2. Adjust the idle screw on the TCT. Until the engine just begin to increase the speed. Then turn it ½ turn CCW. That's it.

Hunting/AFR Adjustments.

If the engine is hunting with the TCT, the engine is probably running too lean. First, check to make sure the TCT carburetor has been installed tightly and the nut at the bottom of the float bowl is securely tightened. If the TCT is properly installed, then adjust the AFR screw as follows:

- A. Remove the rubber cover plug
- B. Insert a 2.4mm Allen wrench into the the AFR screw head and turn ¼ of a turn Counterclockwise (CCW).
- C. Test the engine. If it is still hunting, turn another 1/4 turn CCW.
- D. Once the engine is running properly, reinstall the rubber cover to prevent any dirt getting into the TCT carburetor.

If you have turn it more than 2 turns and it is still hunting, then something else is causing the hunting. Adjust the governor spring outward on the governor arm to strengthen the arm. If you still have a problem, contact TillotsonTCT support at 312-961-8454.



On 208cc engine application the TCT should have following AFR trend +/- 0.5

RPM (Generator)	Throttle DGR	Ca. load	AFR Trend	Note	
2000	6-8	0 (Idle)	11.8 – 16	Never used on generator	
3800		0	13.8 – 14.5	No Load	
3750		10%	13.8 – 14.5		
3650		25%	13.8 – 15	(1200W)	
3600		50%	11.8 – 13	(2000W)	
3500		75%	11.7 – 12.5	(3300W)	
3500		100%	11.6 – 12.2	Never used on generator	